

Application No. 10/600,672  
Response dated : January 13, 2006  
Reply to Office action of July 15, 2005

### **REMARKS**

In response to the Office Action dated July 15, 2005, Applicant respectfully requests reconsideration based on the above claim amendment and the following remarks. Applicant respectfully submits that the claims as presented are in condition for allowance.

Claims 17-29 are pending in the present Application. Claims 28 and 29 have been withdrawn leaving Claims 17-27 for consideration upon entry of the following remarks.

Reconsideration and allowance of the claims are respectfully requested in view of the following remarks.

#### **Claim Rejections Under 35 U.S.C. §103**

In order for an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; *that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made.* *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996). See MPEP 2143.

#### **Claims 17-20 and 27**

Claims 17-20 and 27 are rejected under 35 U.S.C. §103(a) as being unpatentable over Soltanzad et al. (hereinafter "Soltanzad") in view of Poole et al. (hereinafter "Poole"), both documents cited on Applicant's Information Disclosure Citation Form PTO-A820. Applicant respectfully traverses.

Claims 17 and 27 recite "a growth medium for plants or mushrooms, the medium comprising sugar cane mill mud and *a non sphagnum-peat.*" It is alleged in the Office Action that Soltanzad does not disclose the peat moss being a non-sphagnum peat, however, Poole discloses a growth medium with non-sphagnum peat with the "Florida sedge peat" of Table 1

Application No. 10/600,672  
Response dated : January 13, 2006  
Reply to Office action of July 15, 2005

at page 287. Applicant respectfully disagrees and submits that there is at least no suggestion or motivation in the references or to one of ordinary skill in the art to combine Soltanzad and Poole.

Soltanzad specifically discloses composted peat moss and filter-press mud (FPM) in various combinations for growth of flowers (Chrysanthemum). (Page 43, Materials and Methods, third and fourth paragraphs.) Peat moss according to generally accepted definitions includes:

- Organic matter that is under-decomposed or slightly decomposed originating under conditions of excessive moisture such as in a bog.  
[www.weblife.org/humanure/glossary.html](http://www.weblife.org/humanure/glossary.html)
- The partially decomposed remains of various mosses. This is a good, water retentive addition to the soil, but tends to add the acidity of the soil pH.  
[www.thegardenhelper.com/dictionary.html](http://www.thegardenhelper.com/dictionary.html)
- Partially decomposed bog plants such as sphagnum peat, that are harvested, dried, and sold as a soil amender.  
[www.ottawa.ca/residents/healthy\\_lawns/lawns/links/glossary\\_en.shtml](http://www.ottawa.ca/residents/healthy_lawns/lawns/links/glossary_en.shtml)
- A high-quality, organic material that is partially decomposed organic matter. Sphagnum peat is said to be the highest in quality, not to be confused with mountain peat.  
[www.csu.org/environment/xeriscape/resources/page3862.html](http://www.csu.org/environment/xeriscape/resources/page3862.html)
- May refer to any peat formed from moss, but most generally refers to sphagnum peat moss, a peat formed from a type of moss called sphagnum. Of available potting soils for African Violets, those consisting of almost all peat moss are the most highly recommended. ...  
[www.optimara.com/optimaraglossary/p-phy.html](http://www.optimara.com/optimaraglossary/p-phy.html)
- Partly decomposed moss, rich in nutrients and with a high water retention. Commonly used as a soil amendment.  
[www.fernlea.com/misc/glossary.htm](http://www.fernlea.com/misc/glossary.htm)
- Partially decomposed sphagnum moss or sedge used in making composts. Valuable for its pronounced air- and water-holding capacity and its freedom from weeds and disease organisms.  
[www.all-about-planters.com/planters\\_glossary.html](http://www.all-about-planters.com/planters_glossary.html)
- A common soil amendment of decayed sphagnum. See also sphagnum.  
[www.camellia.gulfcoast-gardening.com/glossary.htm](http://www.camellia.gulfcoast-gardening.com/glossary.htm)
- sphagnum: any of various pale or ashy mosses of the genus Sphagnum whose decomposed remains form peat  
[wordnet.princeton.edu/perl/webwn](http://wordnet.princeton.edu/perl/webwn)
- Sphagnum is a genus of mosses commonly called peat moss due to its prevalence in peat bogs. Members of this genus can hold large quantities of water inside their cells; some species can hold up to 20 times their dry weight in water, which is why peat moss is commonly sold as a soil amendment. Peat moss can acidify its

Application No. 10/600,672  
Response dated : January 13, 2006  
Reply to Office action of July 15, 2005

surroundings.  
[en.wikipedia.org/wiki/Peat\\_moss](http://en.wikipedia.org/wiki/Peat_moss)

As conceded in the Office Action, Soltanzad does not disclose that the peat moss is non-sphagnum peat, but as discussed above with respect to generally accepted definitions, Soltanzad specifically teaches sphagnum peat. That is, Soltanzad does not teach a suitable replacement for the use of *sphagnum peat*, and in fact, teaches its use. Soltanzad is silent as to providing any discussion as to alternatives to peat moss, let alone anything to do with non-sphagnum peat. That is, there is no suggestion or motivation in Soltanzad or for one of ordinary skill in the art to look to Soltanzad for teaching the claimed invention including a growth medium for plants or mushrooms, the medium comprising sugar cane mill mud and a non sphagnum-peat of Claims 17 and 27. In fact, Soltanzad teaches away from finding an alternative for sphagnum peat by specifically teaching its use.

Poole discloses combinations of two commercial products with Florida sedge peat, being considered "non-sphagnum peat" of the claimed invention by the Examiner, (Abstract) for the growth of house plants and flowers. Poole is silent as to disclosing any discussion as to providing an alternative to sphagnum peat, including using the Florida sedge peat, let alone anything of a relationship between sphagnum peat and Florida sedge peat. That is, there is no suggestion or motivation in Poole or for one of ordinary skill in the art to look to Poole for teaching the claimed invention or to provide an alternative for sphagnum peat.

Applications including mushroom casing medium are not via with a non-sphagnum peat on its own as described in an exemplary embodiment of the invention. (See, page 3, lines 19-26.) As discussed above, Poole only speaks to Florida sedge peat, e.g. only to non-sphagnum peat. Poole is silent as to any discussion regarding using non-sphagnum peat as an alternative to sphagnum peat let alone any type of relationship between sphagnum and non-sphagnum peat or the requirements of certain applications that may use growth medium. That is, neither Soltanzad nor Poole even discuss the use of their medium in relation to other types of applications, let alone specific to mushroom casing medium having specific requirements.

Application No. 10/600,672  
Response dated : January 13, 2006  
Reply to Office action of July 15, 2005

Particularly, Poole does not teach that sphagnum peat even could be modified with sugar cane mill mud to provide a suitable replacement for sphagnum peat in many applications. Soltanzad and Poole are related to the growth of house plants and flowers which having different requirements for and it totally different than mushroom casing medium.

The Examiner's contention that the disclosure in Soltanzad which is asserted to disclose the combination of peat moss and FPM provides the basis for a combination with Poole to replace the peat moss with a non-sphagnum peat is unsound. As evidenced by the citations above, the person skilled in the art should know that peat moss has many unique properties and that suitable replacements are not readily available in many application. The present invention seeks to provide such a replacement. Soltanzad does not teach a suitable replacement for the use of sphagnum peat, in fact it teaches its use.

As discussed above, there is no suggestion or incentive in Soltanzad and Poole that would have motivated the skilled artisan to modify or combine Soltanzad and Poole and therefore there can be no reasonable expectation of success in doing so, determined from the vantage point of the skilled artisan at the time the invention was made.

For purposes of discussion, even assuming that all elements of an invention are disclosed in the prior art, an Examiner cannot establish obviousness by locating references that describe various aspects of a patent applicant's invention without also providing *evidence of the motivating force which would have impelled one skilled in the art to do what the patent applicant has done*. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. Int. 1993). The references, when viewed by themselves and not in retrospect, must suggest the invention. *In Re Skoll*, 187 U.S.P.Q. 481 (C.C.P.A. 1975).

It is suggested in the instant Office Action that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the medium of Soltanzad by using the Florida sedge of Poole depending upon cost and availability of materials. As discussed above, Soltanzad is silent as to providing any discussion as to alternatives to peat moss, let alone anything to do with non-sphagnum peat, and in fact, specifically teaches sphagnum peat moss use. Poole discussed Florida sedge peat, but is

Application No. 10/600,672  
Response dated : January 13, 2006  
Reply to Office action of July 15, 2005

silent as to disclosing any discussion as to alternatives to peat moss (for cost or availability reasons) including using Florida sedge peat, let alone anything of a relationship between sphagnum and Florida sedge peat. Therefore, there is no evidence in Soltanzad and Poole of a motivating force to do what the applicant has done, namely providing a growth medium for plants or mushrooms, the medium comprising sugar cane mill mud and a non sphagnum-peat of Claims 17 and 27. Soltanzad and Poole when viewed by themselves and not in retrospect, clearly do not suggest the invention.

Secondary considerations support the conclusion that the present invention is nonobvious. Specifically, long-felt need, failure of others to solve the problem (of a dwindling supply of sphagnum peat) are indicia of non-obviousness. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1573, 24 U.S.P.Q.2d 1321, 1333 (Fed. Cir. 1992). The Court of Appeals for the Federal Circuit has made it clear that such secondary considerations of non-obviousness must be considered. *In re Sernaker*, 702 F.2d 989, 217 U.S.P.Q. 1 (Fed. Cir. 1983).

While Soltanzad appears to recognize the need for an alternative to sphagnum peat, it at best only turns to FPM, additionally in combination with sphagnum peat, and not to any alternative to sphagnum peat. Poole does not even recognize the need for alternative to sphagnum peat let alone pointing to Florida sedge peat, or non-sphagnum peat in general, as that alternative. That is, Soltanzad and Poole do not address a long-felt need for an alternative to sphagnum peat and fail to solve the problem of a dwindling supply of sphagnum peat. This, in addition to the success of the present invention providing a viable alternative specifically to sphagnum peat, clearly further indicate the non-obviousness of present invention.

The requirement for a determination of obviousness is that "both the suggestion and the expectation of success must be founded in the prior art, not in applicant's disclosure" (emphasis added). *In re Dow Chem.*, 837 F.2d 469, 473, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988). An Examiner thus cannot base a determination of obviousness on what the skilled person in the art might try or find obvious to try. Rather, the proper test requires

Application No. 10/600,672  
Response dated : January 13, 2006  
Reply to Office action of July 15, 2005

determining what the prior art would have led the skilled person to do, with a reasonable expectation of success. For all the reasons discussed above, Applicant respectfully submits that Soltanzad and Poole would not have led to combining the two references with a reasonable expectation of success as they do not together address issues of finding alternatives to sphagnum peat comprising a growth medium for plants or mushrooms, the medium comprising sugar cane mill mud and a non sphagnum-peat of Claims 17 and 27.

Applicants respectfully submit that at least Claims 17 and 27 are non-obvious over Soltanzad and Poole for all the reasons discussed above. Claims 17 and 27 are not further rejected or objected and are therefore allowable to Applicant. Claims 18-20 depend from Claim 17, inherit all of the limitations of Claim 17 and are correspondingly non-obvious and allowable. Reconsideration of the relevant rejections and allowance of Claims 17-20 and 27 is respectfully requested.

#### Claims 21-26

Claims 21-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Soltanzad in view of Poole and further in view of Ollerenshaw et al., U.S. Patent 5,542,962 (hereinafter "Ollerenshaw").

Claims 24-26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Soltanzad in view of Poole and further in view of McCallister, U.S. Patent 4,219,966 (hereinafter "McCallister"). Applicant respectfully traverses.

Dependent claims inherit all of the limitations of their parent claims. Claims 21-26 depend from Claim 17. As discussed above, Claim 17 is patentably distinct and allowable over Soltanzad and Poole. Ollerenshaw is relied upon to teach a growth medium as a casing soil composition and specific components/proportions of the composition. That is, Ollerenshaw does not cure the deficiencies of Soltanzad and Poole regarding a growth medium for plants or mushrooms, the medium comprising sugar cane mill mud and a non sphagnum-peat as an alternative to sphagnum peat as discussed above.

McCallister is relied upon to teach a growth medium with a bagasse filter. That is, McCallister also does not cure the deficiencies of Soltanzad and Poole regarding a growth

Application No. 10/600,672  
Response dated : January 13, 2006  
Reply to Office action of July 15, 2005

medium for plants or mushrooms, the medium comprising sugar cane mill mud and a non sphagnum-peat as an alternative to sphagnum peat as discussed above.

Applicant respectfully submits that at least Claims 21-26 are non-obvious over Soltanzad, Poole, Ollerenshaw and McCallister for all the reasons discussed above. Claims 21-26 are not further rejected or objected and are therefore allowable to Applicant. Reconsideration of the relevant rejections and allowance of Claims 21-26 is respectfully requested.

### Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

By: Amy Eizon-Copp

Amy Eizon-Copp  
Registration No. 53,993  
Cantor Colburn LLP  
55 Griffin Road South  
Bloomfield, CT 06002  
PTO Customer No. 23413  
Telephone: (860) 286-2929  
Fax: (860) 286-0115

Date: January 13, 2006